Graphic panel + PLC function Logic panel LP-S044

▣ Features

4.4 inch MONO

[Terminal block connector type]

[Ribbon cable connector type]

- Compact structure
  : Reducing cost, space saving and easy operation through PLC+HMI+Input/ output integration
- Improved compatibility with logic
  : 8000-step program capacity
  (the average processing speed 6 to 7μs/step)
  basic command 28,
  application command 220
- Wide device range
  : Peripheral device 10K word, data device 10K word, and other various devices
- Sufficient external I/O
  : Input 16 points, output 16 points(basic)
- Various expansion function
  : External interrupt, 16-key input, 7 Seg. time-sharing display and synchronous communication output.
- Easy software upgrade at website
  (1) LP firmware file (2) GP Editor(drawing program)
  (3) Smart Studio(logic program) (4) Additional protocol
- Displays max. 400 characters
- Enables to save max. 500 pages of user screen
- Different devices monitoring function
  : PLC port allows to monitor and control the variables of additionally connected controllers
- Supports multilingual
  : Supports for Korean, Japanese, English, Chinese, Russian, Vietnamese and Portuguese. Additional languages will be available by firmware.
- Supports multi-font
  : It provides various bitmap and user-selected fonts.
- Various multi-communication ports
  : Both RS232 2 port and RS232/RS422 compound port are provided.
- Device monitoring function
  : It enables to monitor LP device and connected controller devices by LP without graphic design data.
- Printer and barcode reader connection
  : It enables to print alarm history connecting a printer and read barcode connecting a barcode reader.

Please read "Caution for your safety" in operation manual before using.

▣ Manual

Visit our webwite(www.autonics.com) to download 'GP Editor user manual' or 'SmartStudio user manual', 'SmartStudio programing manual', 'LP Series command manual', 'LP-S044 user manual', 'GP, LP user manual for communication'.

- **GP Editor user manual**
  It describes how to write screen data, and is about related usage of LP-S044 HMI function.
- **SmartStudio user manual, SmartStudio programming manual, LP Series command manual**
  It contains install method and usage, commands, etc of SmartStudio.
- **GP, LP user manual for communication** : It describes connection for external devices such as PLC.
- **LP-S044 user manual** : It describes general information on the installation and usage of LP-S044 and system contents.

▣ Ordering information

Model	Item	Series	Monitor size	Display unit	Color	Power supply	Interface	Module	I/O composition	I/O connector	Expansion function type
LP-S044-S1D0-C5T-A	Logic panel	S series	4.4 inch	STN LCD	MONO (blue, white)	24VDC	RS232C, RS422 (1EA for each)	All-in-one type	IN: 16points	Terminal block connector	Supports type A
LP-S044-S1D0-C5R-A										Ribbon cable connector	
LP-S044-S1D1-C5T-A							RS232C (2EA)		OUT: 16points	Terminal block connector	
LP-S044-S1D1-C5R-A										Ribbon cable connector	

▣ Specifications

Model		**LP-S044-S1D0-C5T-A**	**LP-S044-S1D0-C5R-A**	**LP-S044-S1D1-C5T-A**	**LP-S044-S1D1-C5R-A**
I/O connector type		Terminal block connector	Ribbon cable connector	Terminal block connector	Ribbon cable connector
Power supply		24VDC			
Allowable voltage range		90 to 110% of power supply			
Power consumption		Max. 3.6W			
Display performance	LCD type	4.4inch STN Blue Negative			
	Resolution	240×80 dots			
	Display area	112.8mm×37.6mm			
	Color	MONO(blue, white)			
	LCD view angle	Top/Bottom/Left/Right 30° in each direction			
	Backlight	White LED			
	Brightness	Adjustable by software			
Graphic drawing performance	Language※1	English, Korean, Japanese, Chinese, Russian, Vietnamese, Portuguese			
	Text	• High resolution display up to 400 letters • 6×8, 8×8 ASCII character, high definition numbers • 8×16 ASCII characters, 16×16 regional characters(1 to 8 times bigger for width, 0.5 to 5 times bigger for height)			
	Graphic drawing memory	384 KB			
	Number of user screen	500 pages			
	Touch switch	Width 15×Height 4 = 60			
Control performance	Command	Basic command : 28, application command : 220			
	Program capacity	8K step			
	Processing time	Average : 6 to 7μs/step			
	I/O control type	Batch processing			
	Computer control mode	Repeated-doubling method, interrupt processing			
	Device range	*Refer to LP-S044 user manual			
Serial interface		Each port of RS232C, RS422(asynchronous method)		Two ports of RS232C(asynchronous method)	
Real-time controller		RTC embedded			
Battery life cycle		Approx. 3 years at 25℃			
Insulated resistance		Min. 100MΩ(at 500VDC megger)			
Ground		3rd grounding(max. 100Ω)			
Noise trength		± 0.5kV the square wave noise(pulse width : 1μs) by the noise simulator			
Dielectric strength		500VAC(50/60Hz) for a minute			
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour			
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 min.			
Shock	Mechanical	300m/s²(approx. 30G) in each of X, Y, Z directions for 3 times			
	Malfunction	100m/s²(approx. 10G) in each of X, Y, Z directions for 3 times			
Environ -ment	Ambient temperature	0 to 50℃, storage : -20 to 60℃			
	Ambient humidity	35 to 85% RH, storage : 35 to 85% RH			
Protection ratings		IP65F(for front panel)			
Accessory		Fixing bracket : 4EA, Rubber waterproof ring, Battery included			
Approval		CE K			
Weight※2		Approx. 454g(approx. 312g)			

※1: Language can be customized.
※2: This weight is with packaging and the weight in parentheses is only unit weight.
※Environment resistance is rated at no freezing or condensation.

■ Input/Output performance

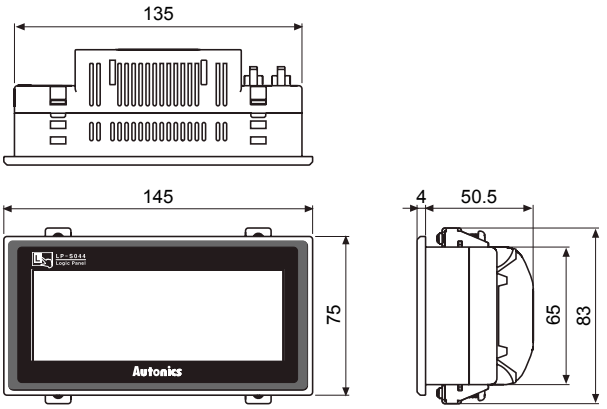
Input performance		Output performance	
Input point	16 points	Output point	16 points
Insulation method	Photo coupler insulation	Insulation method	Photo coupler insulation
Voltage range	19.2 to 28.8VDC	Voltage range	19.2 to 28.8VDC
Rated input voltage	24VDC	Rated input voltage	24VDC
Rated input current	Approx. 4mA	Max. load current	0.1A/1point, 1A/1COM
Input resistance	5.6kΩ	Max. voltage falling when ON	Max. 0.2VDC
Response time	1ms	Response time	1ms
Common method	16 points/1COM	Common method	16 points/1COM

■ Functional description

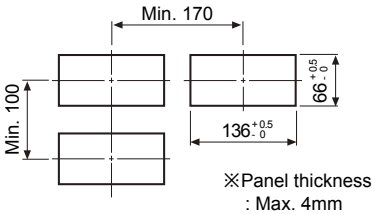
Figure display		Line, rectangle, circle, text, bitmap
Tags	Numeral display	Displays the designated device as numerical value.(decimal, hexadecimal, octal, binary, real number)
	ASCII display	Displays the designated device value as ASCII character.
	Time display	Displays current time or date.
	Alarm history	Registers alarm history.
	Alarm list	Displays generated (not backed up) alarm.
	Comment display	Displays the designated comment as device status or value.
	Lamp	Displays lamp as device status.
	Part display	Displays the designated parts as device status and value.
	Line graph	Displays several device values with a graph of broken line.
	Trend graph	Displays change of device value for time with a graph of broken line.
	Bar graph	Displays a device value with a bar graph.
	Statistic graph	Displays a ratio of several device values with pie graph.
	Panel meter	Displays a device value as panel meter.
	Touch key	Screen is switched, word/bit device values are set when it touched.
	Numeral input	Configures user input value in device.
	ASCII input	Configures user input ASCII code value in device.
System information function		Monitors/Controls LP operation from PLC.
Recipe function		Reads/Writes several PLC device collectively.
Security function		Only acceptable user can observe/operate important data.
Barcode read function		Connects barcode reader, read barcode.
Floating alarm function		Warning message is floated when alarm is generated.
Overlap window		Specific bit device is ON/OFF for designated day and time.
Observe status function		Available to form dynamically overlapping another base screen on the base one.

■ Dimensions

(unit: mm)

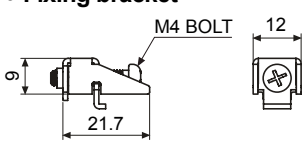


● **Panel cut-out**

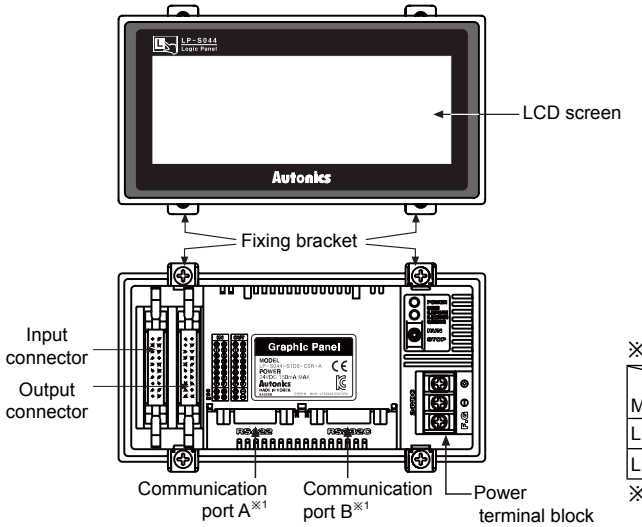


※Panel thickness
: Max. 4mm

● **Fixing bracket**



▣ Part description



※1: Communication port

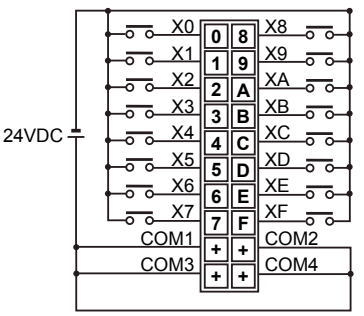
Model \ Communication port	Port A	Port B
LP-S044-S1D0-C5T(R)	RS422	RS232C
LP-S044-S1D1-C5T(R)	RS232C-A	RS232C-B

※For more information, refer to R-32 page and '▣Serial interface' of GP/LP common features.

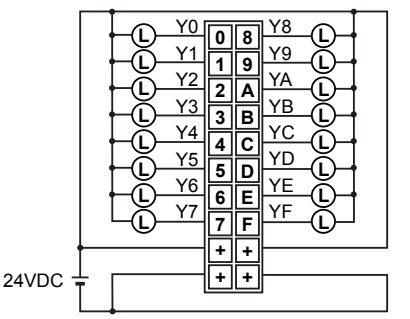
▣ Input·Output wiring

◎ LP-S044-S1D0(1)-C5R

● Input wiring(source type input module)

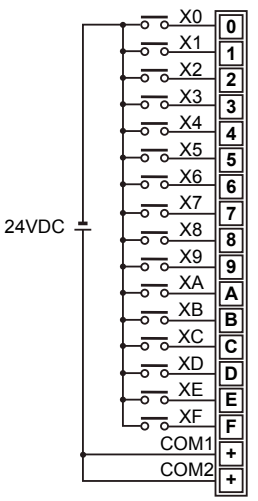


● Output wiring(sink type output module)

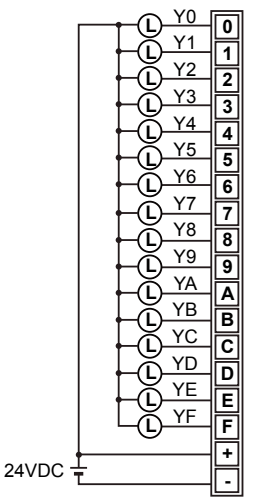


◎ LP-S044-S1D0(1)-C5R

● Input wiring(source type input module)



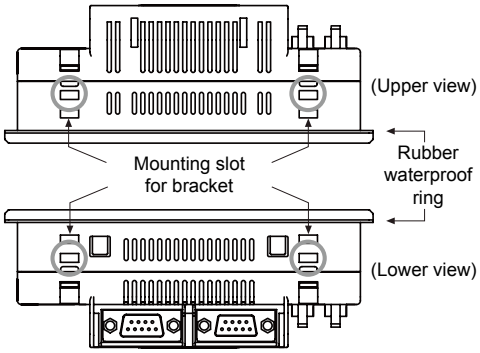
● Output wiring(sink type output module)



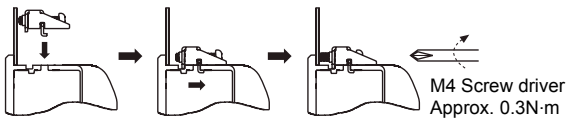
※Check the pin number of the case before wiring.

▣ Installation

1. Set a rubber waterproof ring after placing the ring's joining part under the LP-S044
2. Adhere closely between each edge of the LP-S044 and the rings.
3. Set LP-S044 in panel.
4. Set the fix bracket to 4 bracket slots and fix them with bracket's screws.



● **Mounting bracket**



▣ Sold separately

◎ I/O terminal block and I/O cable

Suitable I/O terminal block	INPUT/OUTPUT	Suitable I/O cable
AFS-H20 (Interface terminal block)	INPUT	CJ-HPHP20-V1N□-1ANR
	OUTPUT	
ABS-H16PA(TN)-NN (Relay terminal block)	OUTPUT	CJ-HPHP20-V1N□-1APR
AFE4-H20-16LF (Sensor connector terminal block)	INPUT	CJ-HPHP20-V1N□-1BNR
	OUTPUT	CJ-HPHP20-V1N□-1APR
—	—	CJ-HP20-VP□-R(OPEN type cable)
		CJ-HP20-VP□-L(OPEN type cable)

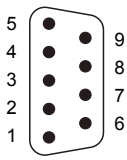
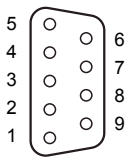
※It is only for ribbon cable connector (hirose connector) type.
※"□" is for cable length. (Basic specification **010** : 1m, **020** : 2m, the others are option)
※For more information, refer to **"I/O terminal block & cable catalog"**.

◎ Communication cable (RS232C, RS422 port)

For serial connectable cable to connect PLC and external devices, refer to the R-32 page for "GP/LP communication cable".

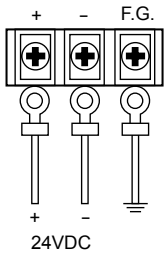
■ Serial interface

- All devices connectable into LP-S044 including PC, PLC, serial printer, barcode reader and dedicated connectors can be connected into both RS232C and RS422 ports.
- Device must be set for the port in system setting for LP-S044, LP-S070. For details, refer to "GP user manual".
- Use the dedicated communication cable for the each connected device.
  (Refer to the "GP/LP communication cable" of R-32 page)
- For the method of wiring external devices of PLC, refer to "GP/LP communication manual".

Port	NO.	Pin(GP-S044, GP-S057, GP-S070)	Pin(LP-S044, LP-S070)
RS232C  D-Sub 9Pin Male	1	Non-used	Non-used
	2	RXD	RXD
	3	TXD	TXD
	4	DTR	DTR
	5	SG	SG
	6	DSR	DSR
	7	Non-used	Non-used
	8	Non-used	Non-used
	9	Non-used	Non-used
RS422  D-Sub 9Pin Female	1	TXD+	TXD+
	2	RXD+	RXD+
	3	Non-used	Non-used
	4	Non-used	Non-used
	5	SG	SG
	6	TXD-	TXD-
	7	RXD-	RXD-
	8	Non-used	Non-used
	9	Non-used	Non-used

■ Power wiring

- For power supply, use the wire of which cross section is at least 0.75mm² and use the wire of which cross section is at least 1.25mm² for grounding.
- Use crimp-on type terminal with at least 3mm of internal diameter and less than 6mm of external diameter.
- Do not apply power before power line connection.
- Check power polarity.
- Tighten the terminal screw with 0.5 to 0.8N·m torque.
- Ground resistance should be less than 100Ω and ground it separately.



■ Battery replacement

Please contact out distributor to replace battery.
It may cause an explosion or a fire when improper battery is used.

■ Caution for using

- Use communication cable after checking whether there is break, short.
- Please install power switch or circuit-breaker in order to cut power supply off.
- Separate this unit from high voltage line, power line to avoid inductive noise.
- Do not use this product at below places.
  - Place where there is severe vibration or impact
  - Place where dust exists, or corrosion causing environments.
  - Place where strong magnetic field or electric noise are generated
  - Place where is temperature/humidity is beyond the specification
  - Place where strong alkalis or vibration or impact
  - Place where there are direct ray of the sun
- Installation environment
  - It shall be used indoor.
  - Altitude Max. 2,000m
  - Pollution Degree 2
  - Installation Category II

▣ GP(Graphic Panel)?

GP-S044 GP-S057 GP-S070

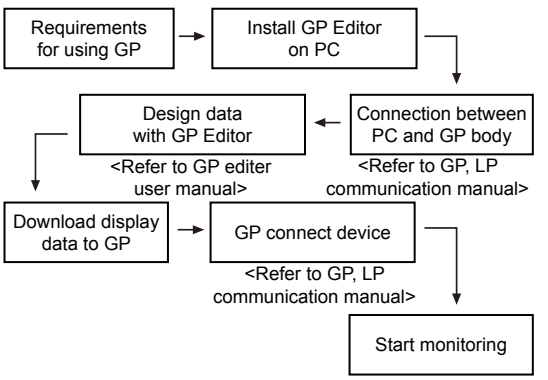
Graphic panel is HMI(Human Machine Interface) device that parameter monitors or changes via graphic interface by communication with PLC, temperature controller or other control units.
Graphic interface of GP is very effective to indicate value or status of parameter with visual interface that enables the communication between controller and user.
GP is able to monitor parameters virtually with LCD screen, switch screen by touching screen, set or change parameters. GP connecting with controller via serial communication method translates data and displays various control parameters with graphic.
For example, in case of the target of parameters is the temperate, the numerical value of temperature is shown with a tag and the change in temperature for time can be graphed on the screen.

▣ Preparation for using GP

The numerical value of temperature | Graph of temperature

1) GP body
2) PC
3) GP Editor
   - Software for drawing GP screen
4) Manual
   - GP editor user manual
   - LP, GP Communication manual
   - GP-S044/S057, GP-S070 user manual
5) Communication cable
   - Communication cable for PC connection
   - Communication cable for controller connection
6) Access devices
   (PLC or controller built in communication ports)

▣ Basic operation flow



▣ Advantages of using GP

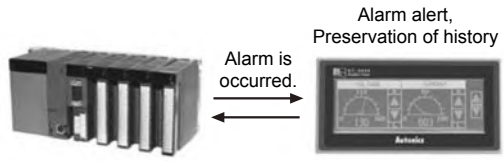
◎ Complicated environment of operation and control

It graphicalizes mechanical control components such as button, switch and lamps so that saves cost and space and improves the preservation of devices.

Control part | GP-S044

◎ Setting and change of production process

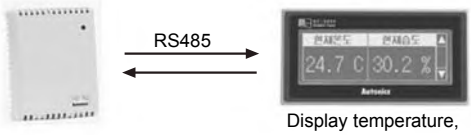
It graphicalizes mechanical control components such as button, switch and lamps so that saves cost and space and improves the preservation of devices.



PLC | GP-S044

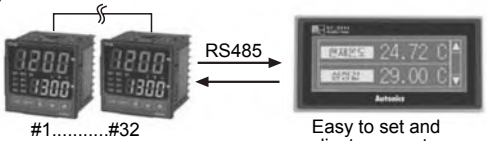
◎ Convenient setting by user

It sets complicated or non-displaying controller (Thermometer/hygrometer, temperature controller etc).
1)Temperature/Humidity without display device



Display temperature, humidity

2)Temperature controller



#1.....#32 | Easy to set and adjust parameter.

◎ Effective data control

It prints alarm history of controller using printer. It reads the data from barcode reader and save it in PLC.
1)PLC/Printer

PLC | GP-S044 | Printer

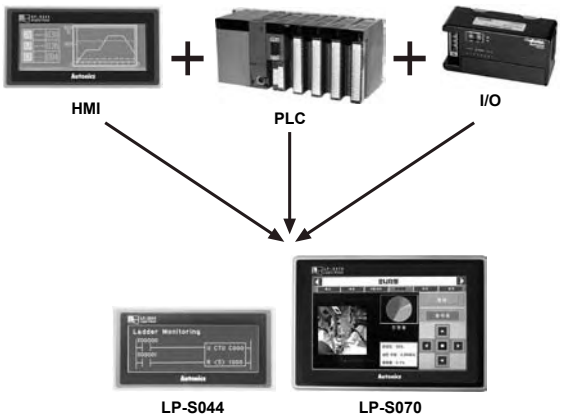
2)Barcode reader/PLC

GP-S044 | PLC

◎ Communication between heterogeneous controllers

PLC | GP-S044 | Thermometer/ hygrometer

▣ LP(Logic Panel)?



Logic panel is created for integrated panel in most demanding industrial environments that have been consisted of HMI, PLC and I/O. The LP through integration realizes cost down, wire reduction, space saving and enhanced user friendliness. The logic panel perfectly supports serial communication and editing display with GP Editor and about 250 commands of SmartStudio invented on our own to edit PLC ladder/mnemonic, allowing accelerating product development and designing. And also this device can control and monitor various output devices (sensors, button, etc) and output devices (solenoid, lamp, motor, etc) individually.

▣ Preparations for using LP

1) LP body
2) PC
3) Software
   ① GP Editor
   - Software for drawing LP screen
   ② SmartStudio
   - Software for logic program
4) Manual
   - GP Editor user manual
   - GP,LP Communication manual
   - SmartStudio user manual
   - SmartStudio programming manual
   - LP-S044, LP-S070 user manual
   - LP series command manual
5) Communication cable
   - Communication cable for PC connection
   - Communication cable for controller connection
6) Access device
   (PLC or controller built in communication ports)

▣ Basic operation flow

Requirements for using LP

↓

<Refer to GP editer user manual and SmartStudio>

Install drawing program (GP Editor) and logic program (Smart Studio) on PC

↓

<Refer to communication manual>

Connection PC with LP body
※When LP turns on, RUN/STOP switch holds STOP position.

↓

<Refer to the SmartStudio programming manual>

Make Logic program with SmartStudio

↓

Download logic data to LP body

↓

Disconnect Smart Studio with LP body/ Connect GP Editor with LP body

↓

Create screen or download to LP body

↓

Test
※RUN/STOP switch holds RUN position.

↓

Debugging or editing program

↓

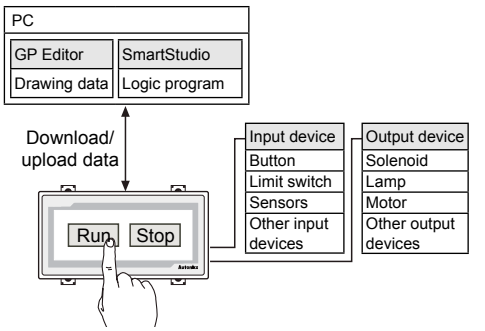
Control or start monitoring

※Refer to the manual for details on website(www.autonics.com) resources.

▣ System configurations

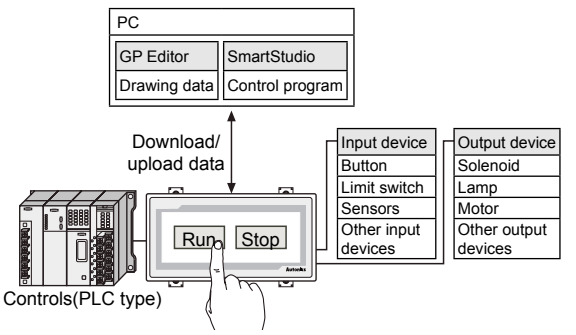
◎ Stand alone(LP Series)

Stand alone system in LP series controls a variety of I/O without adding other devices and monitors and control operation element through direct touch of screen. (device, parameter, etc.)



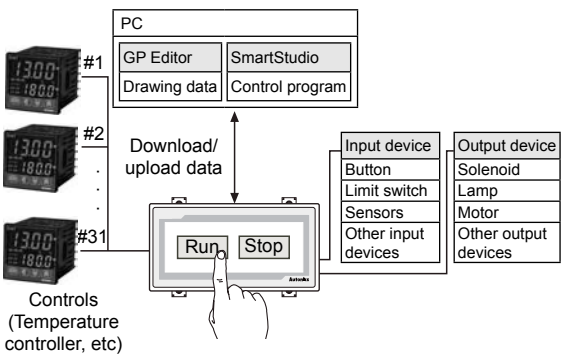
◎ 1:1 configuration (LP/GP Series)

The device function makes it possible to monitor the operation data (Device, parameter, etc.)



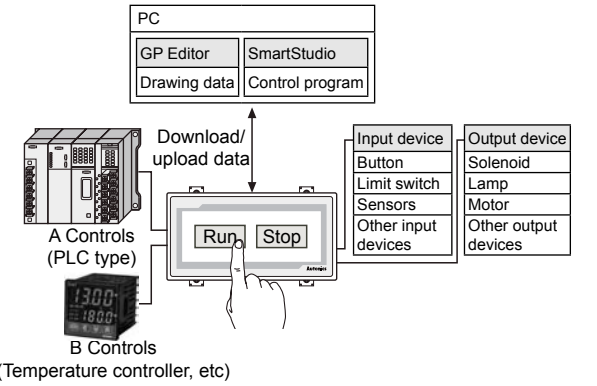
◎ 1:N configuration (LP/GP Series)

The device function makes it possible to monitor the operation element (device, parameter, etc.) by connecting in a 1:N configuration (Up to 32 units)



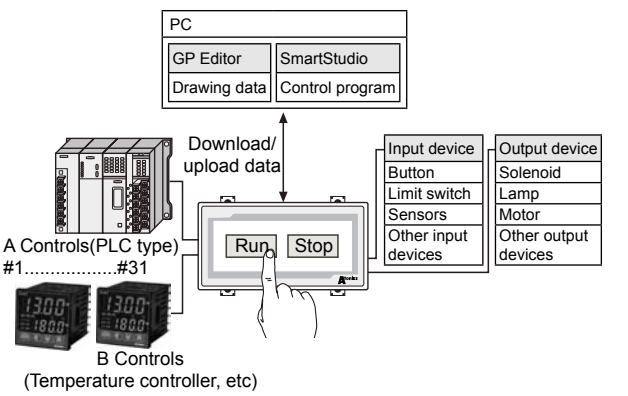
◎ 1:1:1 configuration (GP/LP Series)

The device function makes it possible to monitor, control and the operation element (device, parameter, etc.) between different devices using two separate communication port.



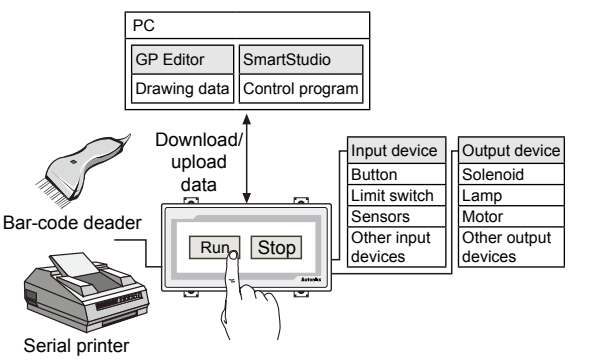
◎ 1:1 N configuration (GP/LP Series)

The device function makes it possible to monitor, control and the operation element (device, parameter, etc.) between different devices using two separate communication port.. In case of RS-422 port, 1:N is available only. (Up to 31 units).



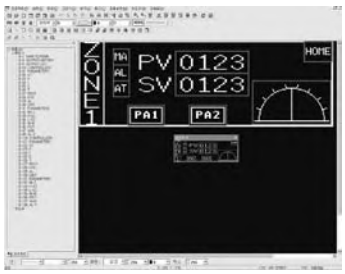
◎ Bar-code, printer connection (GP/LP Series)

It can read bar-code and print a history using printer.



▣ Software

◎ GP Editor(Drawing program)



- This drawing software is for GP/LP series.
- GP Editor is the software that allows creating a screen and designs a tag layout, and then transfer the data from screen to GP/LP. After download, GP/LP starts monitoring according to your screen data.

◎ SmartStudio(Logic program)

- Logic software is for LP series.
- Support multi-project
  : It is possible to open maximum 5 projects at a same time.
- Easy program editing
  : Block of cell units can be edited.
  Split-screen editing is available.
  It provides various editing screens such as variable screen, describe screen, variable /describe screen, etc,.
- Various monitor functions
  : It provides monitor functions such as variable monitor, device monitor and system monitor, time chart.
- Comfortable user interface
  : It ensures easy operation with Microsoft windows layout.
- Wide range of Message windows
  : It supports various message windows to edit and check program.
- Real time convert ladder to mnemonic
  : Ladder and mnemonic can be written and read to edit simultaneously.

Visit our website (www.autonics.com) and download software or manuals.

< System requirements >

Item	Minimum requirements
System	IBM PC compatible computer with Intel Pentium III or above
Operating system	Microsoft Windows 98/NT/XP/Vista/7
Memory	256MB or more
Hard disk	More than 1GB of free hard disk space
VGA	1024×768 or higher resolution display
Others	RS-232 serial port(9-pin), USB port

▣ Manual

◎ GP/LP common manual

- GP Editor user manual
  This section describes how to make screen data and use HMI function with GP Editor.
- Communication manual
  For more information of serial connection with external devices such as PLC, refer to manual before connecting.
- GP-S044/S057, GP-S070 user manual
  The manual describes installation and system organization and menus.

◎ LP manual

- SmartStudio manual
  This section describes how to install and use SmartStudio.
- Programming manual
  The manual has command and instruction.
- LP-S044, LP-S070 user manual
  The manual describes installation and system organization and menus.
- LP Series instruction manual
  The manual has LP installation, system configuration and instruction.

▣ Precaution for using

- Do not press touch panel with hard and sharp object.
- Please store the device in the recommended temperature range, or LCD panel can be damaged.
- Please check pin number shown in "Communication manual" when connect communication port
- Do not block the ventilating opening of this product.
- Do not use or store it in a place with direct ray of light or dust.
- Do not use or store it in a place with shock or vibration.
- The ground wire of GP/LP should be grounded separately. The ground resistance should be max. 100Ω, please use the wire of min. 1.25mm² dimension.
- Please check the pin number and connect to GP/LP communication port.
- Please tighten bolt on terminal block with specified tightening torque.
- When liquid crystal from the broken LCD is smeared on your skin, wash it for 15 minutes. If it is gotten in your eye, wash it for 15 minutes and contact a medical specialist for more information.
- Do not inflow dust or wire dregs into the unit.
- For cleaning, do not use water or an oil-based detergent, use dry towels.
- It should be done away regarded as an industrial waste.

▣ Connectable device with GP/LP

Series	Connectable device	Connection type	GP-S057	GP/LP-S044	GP/LP-S070
LS Master-K	MK-10S1	CPU direct connection loader	○	○	○
	MK-80S	CPU direct connection loader	○	○	○
	MK-120S	CPU direct connection loader	○	○	○
	MK-200S	CPU direct connection loader	○	○	○
	MK-300S	CPU direct connection loader	○	○	○
	MK-1000S	CPU direct connection loader	○	○	○
LS Glofa	GM4	CPU direct connection loader	○	○	○
	GM6	CPU direct connection loader	○	○	○
	GM7U	CPU direct connection loader	○	○	○
LS CNET (Cnet integrated CPU)	MK-80S	Cnet	○	○	○
	MK-120S	Cnet	○	○	○
	MK-200S	Cnet	○	○	○
LS CNET (For Cnet unit)	MK-80S	Cnet	○	○	○
	MK-120S	Cnet	○	○	○
	MK-200S	Cnet	○	○	○
	MK-300S	Cnet	○	○	○
	MK-1000S	Cnet	○	○	○
LS XGT(For Cnet unit)	XGK- PUS	Cnet	○	○	○
LS XGB (Cnet integrated CPU)	XBM	Cnet	○	○	○
	XBC	Cnet	○	○	○
LS XGB (For Cnet unit)	XBM	Cnet	○	○	○
	XBC	Cnet	○	○	○
OEMAX (SAMSUNG)	N70	Cnet	○	○	○
	N70Plus	Cnet	○	○	○
OEMAX FARA	NX7	CPU direct connection loader	○	○	○
	NX70	CPU direct connection loader	○	○	○
MITSUBISHI FX	FX1S	CPU direct connection loader	○	○	○
	FX1N	CPU direct connection loader	○	○	○
	FX2N	CPU direct connection loader	○	○	○
	FX2NC	CPU direct connection loader	○	○	○
	FX3U	CPU direct connection loader	○	○	○
MITSUBISHI Q (For Cnet unit)	Q00J	Cnet	○	○	○
	Q00	Cnet	○	○	○
	Q01	Cnet	○	○	○
	Q02	Cnet	○	○	○
	Q02H	Cnet	○	○	○
	Q06H	Cnet	○	○	○
	Q12H	Cnet	○	○	○
	Q25H	Cnet	○	○	○
NAIS FP	FP0-C10	CPU direct connection loader	○	○	○
	FP0-C14	CPU direct connection loader	○	○	○
	FP0-C16	CPU direct connection loader	○	○	○
	FP0-C32	CPU direct connection loader	○	○	○
	FPG- C24R2	CPU direct connection loader	○	○	○
	FPG- C32T	CPU direct connection loader	○	○	○
	FPG- C32T2	CPU direct connection loader	○	○	○
	FP0R-C10	CPU direct connection loader	○	○	○
	FP0R-C14	CPU direct connection loader	○	○	○
	FP0R-C1	CPU direct connection loader	○	○	○
	FP0R-C32	CPU direct connection loader	○	○	○
	FP0R-T32	CPU direct connection loader	○	○	○
	FP0R-F32	CPU direct connection loader	○	○	○
SIEMENS SIMATIC S7-200	CPU221	CPU direct connection loader	○	○	○
	CPU222	CPU direct connection loader	○	○	○
	CPU224	CPU direct connection loader	○	○	○
	CPU224XP	CPU direct connection loader	○	○	○
	CPU224XPsi	CPU direct connection loader	○	○	○
	CPU226	CPU direct connection loader	○	○	○

▣ Connectable device with GP/LP

Series	Connectable device	Connection type	GP-S057	GP/LP-S044	GP/LP-S070
SIEMENS SIMATIC S7-300	CPU312	CPU direct connection loader	○	○	○
	CPU312C	CPU direct connection loader	○	○	○
	CPU313C	CPU direct connection loader	○	○	○
	CPU313C-2	CPU direct connection loader	○	○	○
	CPU314	CPU direct connection loader	○	○	○
	CPU314C-2	CPU direct connection loader	○	○	○
	CPU315-2	CPU direct connection loader	○	○	○
	CPU317-2	CPU direct connection loader	○	○	○
	CPU319-3	CPU direct connection loader	○	○	○
Allen-Bradley	MicroLogicx 1000	CPU direct connection loader	○	○	○
	MicroLogicx 1200	CPU direct connection loader	○	○	○
	MicroLogicx 1500	CPU direct connection loader	○	○	○
OMRON SYSMAC C	CPM 1A	CPU direct connection loader	○	○	○
OMRON Temperature controller	E5AN	Modbus	○	○	○
	E5AR	Modbus	○	○	○
	E5CN	Modbus	○	○	○
	E5EN	Modbus	○	○	○
	E5ER	Modbus	○	○	○
AUTONICS	MT Series	Private communication	○	○	○
		Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	MP Series	Private communication	○	○	○
	THD Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	TZ Series	Private communication	○	○	○
	TK Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	TM Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	CT Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	DS/DA Series	Modbus(TYPE A)	○	○	○
	ARM Series	Modbus(TYPE A)	○	○	○
	LP-S044, LP-S070	CPU	○	○	○
			○	○	○
KONICS	DPU Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
	KRN50	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
DELTA	DTB Series	Modbus	○	○	×
		Modbus(TYPE A)	○	○	○
DANFOSS	FC Series	Modbus	×	×	×
		Modbus(TYPE A)	○	○	○
UNIVERSAL	UNIVERSAL	Modbus(Slave)	○	○	○
MODBUS MASTER	MODBUS MASTER	Modbus(Master)	○	○	○

※GP/LP connectable device list will keep updated according to the upgrade of GP Editor or additional patch. It is recommended to use the latest version of Editor.

※Applicable GP/LP firmware version is determined by GP Editor version. Whole GP system goes down if non-compatible firmware version is used.

※Visit our website (www.autonics.com) to check update of latest GP Editor and GP/LP firmware and to get more detailed instructions.

※Refer to the user manual to select proper communication cable between GP and controllers. (Sold separately)